

thereby pass through a filter 110 before entering the housing.

Due to the exchangeability of the sample carrier, the apparatus can be adjusted to the most different conditions while being of compact construction, without having to accommodate all the required auxiliary devices at the same time. In addition thereto, by the most simple construction of the reflector in the sample room, as well as by the possibility of exchanging individual parts of the reflector in case they had become blind, there is guaranteed an extremely favorable and uncomplicated access to the apparatus.

I claim:

1. Testing apparatus for light- and weather-resisting properties, comprising a sample room and a gas discharge radiator arranged in the sample room, as well as a mirror arranged between the radiator and the samples, selectively reflecting the infrared portion of the radiation and permeable to the visible and ultraviolet portions thereof, and an additional mirror, selectively reflecting the visible and ultraviolet portions of the radiation and permeable to the infrared portion, characterized by the facts that the samples (30), in a manner already known as such, are placed on an essentially horizontal support (32, 86, 92) and that the sample room located above the support is composed by an oblong reflector channel (18) of parabolic section, of which the extremities are shut off by front walls (24) of parabolic contour; and the side walls (20, 22) of the reflector channel (18), being parabolic in operational condition, are made of elastic ductile sheet-metal, which assumes the parabolic shape when applied to the parabolic contour of the front walls (24).

2. Testing apparatus for light- and weather-resisting properties according to claim 1, characterized by the fact that the front parabolic reflector wall (22) is pivotable together with a door (48).

3. Testing apparatus of light- and weather-resisting properties according to claim 2, characterized by the fact that an upper edge (50) of the reflector wall is movably arranged on the door (48) and the lower edge (52) rigidly mounted.

4. Testing apparatus of light- and weather-resisting properties according to claim 1, characterized by the fact that the gas discharge radiator (26) is a xenon radiator which is arranged in the focal line of the reflector channel (18) of parabolic section.

5. Testing apparatus of light- and weather-resisting properties according to claim 4, characterized by the fact that the mirror selectively reflecting the infrared portion of the radiation but permeable to the visible and ultraviolet portion thereof is configured as a third of a tube (36), curved away from the xenon radiator towards the samples (30), being arranged between the upper edges of the reflector side walls (20, 22).

6. Testing apparatus of light- and weather-resisting properties according to claim 4, characterized by the fact that the additional mirror selectively reflecting the visible and ultraviolet portions of the radiation and permeable to the infrared portion (38) is arranged on that side of the xenon radiator not facing the samples (30) in rooflike configuration in such a manner that it leans tangentially against the imaginary elongation of the parabolic reflector.

7. Testing apparatus of light- and weather-resisting properties according to claim 1, characterized by means for conveying the infrared portion (42) of the radiation off upwards.

8. Testing apparatus of light- and weather-resisting properties according to claim 4, characterized by means for cooling the samples (30) and the xenon radiator comprising a double-lined air cooling system.

9. Testing apparatus of light- and weather-resisting properties according to claim 8, characterized by means for sucking the cooling air (68) for the xenon radiator (26) in from above and for leading it along the xenon radiator (26).

10. Testing apparatus for light- and weather-resisting properties according to claim 8, characterized by means for sucking the cooling air (74) for the samples (30) in from below and for admitting it via an air inlet slit (78) to one of the front faces (24) of the reflector channel (18) and then for eliminating it from the other front face (24) through an outgoing air slit (82).

11. Testing apparatus of light- and weather-resisting properties according to claim 10, characterized by the fact that the air inlet and outlet slits (78, 82) are adjusted to the width of the sample carriers.

12. Testing apparatus of light- and weather-resisting properties according to claim 10, characterized by the fact that the air inlet slit (78) is arranged at a higher level than the outgoing air slit (82) in relation to the supporting plane for the samples (30).

13. Testing apparatus of light- and weather-resisting properties according to claim 9, characterized by means for turbulently admitting the cooling air (80).

14. Testing apparatus of light- and weather-resisting properties according to claim 1, characterized by means for overlappingly arranging the samples (30).

15. Testing apparatus for light- and weather-resisting properties according to claim 14, characterized by means for coating the bordering strips of the samples (30) in the marginal area in order to avoid any whirling-up in the air current.

16. Testing apparatus of light- and weather-resisting properties according to claim 1, characterized by the fact that the horizontal support is an exchangeable tin tub (32) which is lodged in a frame through a bottom opening in the sample room.

17. Testing apparatus of light- and weather-resisting properties according to claim 16, characterized by means for adjusting the depth of the tub (32) to the height of the samples in such a manner that the surface to be tested is always on the same level.

18. Testing apparatus of light- and weather-resisting properties according to claim 16, characterized by means for placing supports of different thickness in the tube (32) in order to exactly level the surface of the samples (30).

19. Testing apparatus of light- and weather-resisting properties according to claim 16, characterized by means for flooding and adjusting the tub (82) to a certain water level.

20. Testing apparatus of light- and weather-resisting properties according to claim 19, characterized by the fact that the flooding installation, independently from the other devices, is only connected with the exchangeable tub (86).

21. Testing apparatus of light- and weather-resisting properties according to claim 19, characterized by means for automatically switching off the ventilation (74) to the sample room (18) during the flooding and for switching it on again together with the draining of the water.

22. Testing apparatus of light- and weather-resisting properties according to claim 16, characterized by the